

WHAT IS CLAIMED IS:

1. A cosmetic apparatus comprising:
at least one conductive pad;
multiple ultrasonic transducers placed on the at least one conductive pad, which is configured to be connected to an ultrasonic wave signal generator to transmit ultrasonic waves to a skin surface through the at least one conductive pad, wherein at least one ultrasonic transducer is placed on each conductive pad; and
a low- and/or moderate-frequency current terminal connected to the at least one conductive pad, which is configured to be connected to a low- and/or moderate-frequency current generator to transmit a low- and/or moderate-frequency current to the skin surface through the at least one conductive pad.
2. The cosmetic apparatus according to Claim 1, wherein the at least one conductive pad is one conductive pad, and the multiple ultrasonic transducers are placed on the one conductive pad.
3. The cosmetic apparatus according to Claim 1, wherein the conductive pad is made of a blast-treated pressed titanium.
4. The cosmetic apparatus according to Claim 2, wherein the multiple ultrasonic transducers are arranged next to each other symmetrically around a center of a surface of the pad facing the skin surface.
5. The cosmetic apparatus according to Claim 4, wherein the surface of the pad has a circular shape.
6. The cosmetic apparatus according to Claim 1, wherein the at least one conductive pad is multiple conductive pads, each being provided with multiple ultrasonic transducers and a low- and/or moderate-frequency current terminal.
7. The cosmetic apparatus according to Claim 6, wherein the multiple pads have different shapes or different colors.
8. The cosmetic apparatus according to Claim 2, wherein one pad is provided per ultrasonic transducer, and the cosmetic apparatus comprises a plurality of pads and a support on which the plurality of pads are arranged.

9. The cosmetic apparatus according to Claim 8, wherein the support has a longitudinal shape, and the cosmetic apparatus further comprises a belt onto which the support is attached.

10. The cosmetic apparatus according to Claim 1, further comprising a gripper configured to be held by a hand.

11. The cosmetic apparatus according to Claim 1, wherein both of the low-frequency current terminal and the moderate-frequency terminal are provided.

12. The cosmetic apparatus according to Claim 8, further comprising a conductive adhesive chip adhered to a surface of each pad, said chip being configured to be in contact with the skin surface.

13. The cosmetic apparatus according to Claim 12, wherein the conductive adhesive chip comprises a gel layer and a conductive base attached to the gel layer on a side opposed to the pad.

14. The cosmetic apparatus according to Claim 1, further comprising the ultrasonic wave signal generator.

15. The cosmetic apparatus according to Claim 1, wherein the low- and/or moderate-frequency current terminal is provided in the ultrasonic transducer.

16. A cosmetic system comprising the cosmetic apparatus defined in Claim 1 and a control apparatus which comprises: the ultrasonic wave signal generator; the low- and/or moderate-frequency current generator; a controller which controls the ultrasonic wave signal generator and the low- and/or moderate-frequency current generator; and an input unit which inputs commands to the controller.

17. The cosmetic system according to Claim 16, further comprising a terminal connected to a ground

18. The cosmetic system according to Claim 17, wherein the terminal is a conductive adhesive configured to adhere to the skin surface.

19. The cosmetic system according to Claim 16, wherein the ultrasonic wave signal generator transmits two signals corresponding to different frequencies of ultrasonic waves.

20. The cosmetic system according to Claim 19, wherein the different frequencies are about 3 MHz and about 1.5 MHz.

21. The cosmetic system according to Claim 16, wherein the low-frequency current has a frequency of about 1 Hz to about 50 Hz.

22. The cosmetic system according to Claim 16, wherein the moderate-frequency current has a frequency of about 1 kHz to about 10 kHz.

23. The cosmetic system according to Claim 16, wherein the low- and/or moderate-frequency current generator is comprised of both a low-frequency current generator and a moderate-frequency current generator.

24. The cosmetic system according to Claim 16, wherein the controller activates the multiple ultrasonic transducers in sequential cycles.

25. The cosmetic system according to Claim 16, wherein the controller activates the low- and/or moderate-frequency current generator intermittently in cycles.

26. The cosmetic system according to Claim 16, wherein the controller activates the ultrasonic transducers to control the intensity of the ultrasonic waves in solenoid curves.

27. The cosmetic system according to Claim 26, wherein the controller activates the ultrasonic transducers intermittently in cycles.

28. The cosmetic system according to Claim 24, wherein the controller activates the low- and/or moderate-frequency current generator intermittently in cycles, wherein the activation cycles of the ultrasonic transducers and the intermittent cycles of the low- and/or moderate-frequency current generator are synchronized.

29. The cosmetic system according to Claim 24, wherein one pad is provided per ultrasonic transducer, and the cosmetic apparatus comprises a plurality of pads arranged on a support, wherein ultrasonic waves and a low- and/or moderate-frequency current are transmitted to each pad in sequential patterns.

30. A cosmetic method using the cosmetic apparatus defined in Claim 1, comprising:

- applying a conductive topical medium on a skin surface;
- placing the pad on the medium-applied skin surface;

activating the multiple ultrasonic transducers in sequence to transmit ultrasonic waves in patterns to the medium-applied skin surface through the pad while sliding the pad against the medium-applied skin surface; and

transmitting in patterns a low- and/or moderate-frequency current to the medium-applied skin surface through the pad in combination with the ultrasonic waves while sliding the pad against the medium-applied skin surface.

31. The cosmetic method according to Claim 30, wherein two signals corresponding to different frequencies of ultrasonic waves are transmitted to the skin surface.

32. The cosmetic method according to Claim 30, wherein the different frequencies are about 3 MHz and about 1.5 MHz.

33. The cosmetic method according to Claim 30, wherein the low-frequency current has a frequency of about 1 Hz to about 50 Hz.

34. The cosmetic method according to Claim 30, wherein the moderate-frequency current has a frequency of about 1 kHz to about 10 kHz.

35. The cosmetic method according to Claim 30, wherein the low- and/or moderate-frequency current is comprised of both a low-frequency current and a moderate-frequency current.

36. The cosmetic method according to Claim 30, wherein the multiple ultrasonic transducers transmit ultrasonic waves in sequential cycles.

37. The cosmetic method according to Claim 30, wherein the low- and/or moderate-frequency current is transmitted intermittently in cycles.

38. The cosmetic method according to Claim 30, wherein the intensity of the ultrasonic waves transmitted from the ultrasonic transducer is controlled in solenoid curves.

39. The cosmetic method according to Claim 38, wherein the ultrasonic transducer transmits ultrasonic waves intermittently in cycles.

40. The cosmetic method according to Claim 36, wherein the low- and/or moderate-frequency current is transmitted intermittently in cycles, wherein the cycles of the ultrasonic waves and the intermittent cycles of the low- and/or moderate-frequency current are synchronized.

41. A cosmetic method using the cosmetic apparatus defined in Claim 8, comprising:

- applying a conductive topical medium on a skin surface;
- placing the longitudinal pad on the medium-applied skin surface; and
- transmitting in sequential patterns ultrasonic waves and a low- and/or moderate-frequency current to the medium-applied skin surface through the pads.

42. A cosmetic method using the cosmetic apparatus defined in Claim 11, comprising:

- placing the pads with the chips on the skin surface without a conductive topical medium applied on the skin surface; and
- transmitting in sequential patterns ultrasonic waves and a low- and/or moderate-frequency current to the medium-applied skin surface through the pads and the chips.